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May 11, 2005

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Docket 04-36, ex parte communication
pursuant to Section 1.1206 of the Rules

Dear Ms. Dortch:

Representatives of the National Emergency Number Association ("NENA") met with Commissioners and their staffs on Monday, May 9, and Tuesday, May 10, 2005, as follows:

On Monday, NENA Technical Issues Director Roger Hixson, Government Affairs Director Steve Seitz and I as counsel met with Commissioner Abernathy and Acting Legal Advisor Pete Belvin. We distributed and spoke from a previous ex parte communication dated 4/21/05 and filed in WC Docket 04-36 by NENA, Greater Harris County and Tarrant County (both in Texas).

On Tuesday, the NENA representatives met with Senior Legal Advisor Barry Ohlson and Legal Advisor Scott Bergmann of the office of Commissioner Adelstein, and with Chief of Staff Dan Gonzalez and Legal Advisor Sam Feder of Chairman Martin's Office. In addition to the 4/21 ex parte, we distributed and spoke from the attached set of slides. The slides also were distributed Tuesday to Jessica Rosenworcel, Legal Advisor to Commissioner Copps, with whom Messrs. Hixson and Seitz had met earlier, and to Pete Belvin, as a follow-up to the referenced Monday meeting.

In all the meetings, the NENA representatives discussed the relative merits of a set of initial requirements for IP service customer access to enhanced 9-1-1 that could be achieved within a relatively brief period of four to six months from release of the text of an order in the docket. NENA repeated the view expressed in the 4/21 ex parte that a brief time spent now to develop a national project plan -- with the participation of IP providers, ILECs acting as 9-1-1 system service providers, intermediate vendors and 9-1-1 authorities (particularly those who had experience in "First Office Applications") – under the "directive influence" of the FCC would pay off later in time saved for improved direct access to E9-1-1 systems. NENA also repeated its view that use of ten-digit numbers for non-enhanced access is only a temporary expedient that should not rely on administrative numbers never intended or staffed for emergency response.

Responding to particular interest shown in a short-term solution known as "routable but non-dialable numbers" – discussed as Option 4 in the 4/21 ex parte – NENA prepared the material appearing in the Appendix of the Exhibit hereto.

Please direct any questions to the undersigned.

Sincerely,

James R. Hobson

cc: Dan Gonzalez, Sam Feder, Pete Belvin, Jessica Rosenworcel, Barry Ohlson, Scott Bergmann, Tom Navin, Jim Schlichting

EXHIBIT

NENA
Ex parte communication, WC Docket 04-36
May 11, 2005

ACCESS TO ENHANCED 9-1-1 BY IP SERVICES

What should the FCC do?

- provide `directive influence' to initiate a national plan for an immediate mix of solutions for VoIP provider access to E9-1-1 systems with participation by
    - NARUC and other state authorities;
    - PSTN network services supporters;
    - ILECs acting as 9-1-1 System Service Providers ("SSPs");
    - VON Coalition and other IP industry representatives; and
    - NENA and local 9-1-1 authorities, especially those with experience in fast-tracked "First Office Applications."
- support universal capabilities, ie, a mix of solutions that enables all VoIP providers reasonably to access E9-1-1 across the nation within a set time frame.
- identify time frames that are capable of fulfillment without waivers from the majority of VoIP providers.
- require that any necessary waivers be filed early in the time frames (not at the 11th hour).
- expect fast tracking of national plan development and implementation.
- establish that the National 9-1-1 Program Office is expected to play a coordination role, and that NENA, as the national expert in E9-1-1 systems and services, will act as a leader in the work.
- clearly establish that short term fixes options in the mix of solutions are temporary, and will not be allowed to justify lack of progress toward longer-term solutions.

  - Example: The Gateway solution (Slide _) is the most supportive of longer term needs, although direct dedicated trunking can easily have a role in selected instances.

- consider that establishing cost factors and cost recovery is a necessary part of the solution process.

What can be done in given timeframes?

- CLEC interfaces are available within 120 days, where CLEC digital networks that can access E9-1-1 are available. Not a nationally applicable solution yet.

- Gateways ("ESGWs" on Slide 2) provided by E9-1-1 system provider ILECs or vendors can be accomplished within 120 days, but not for all areas. Full availability would take an estimated 6-12 months even if fast tracked.[1]

- Direct, dedicated trunking is feasible within 120 days, for selected cases, but not for all of the potentially 400 VoIP providers connecting to 500 Selective Routing switches run by perhaps 20 E9-1-1 SSPs. The task would be intimidating in terms of logistics or cost.

- Routable but Non-Dialable PSTN access to the Selective Routers could be done within 120 days if we start national planning now. (See APPENDIX) If real national planning does not start until June, and completion would be expected by October, then it is doubtful that this option could be nationally deployed in a careful, reliable, and useable manner in that time frame.

- Direct dedicated trunking and Gateway access methods are the options that support longer-term goals, such as the Migratory ("I2") design as

[1] It should be borne in mind that if the window to implement ESGWs owned by the E911SSPs that are RBOCs is within 120 days, the RBOCs will need to use fewer ESGWs with longer dedicated trunks. That will mean that those longer trunks will often be interLATA. Therefore it must be clear that the RBOCs are permitted to provide those interLATA trunks without interconnecting to an IXC. Some RBOCs do not think they have that authority for this purpose under existing regulation of their long-distance service, an apparent hangover from certain rulings under the old AT&T divestiture consent decrees.

defined by NENA at
http://www.nena.org/VoIP_IP/I_short_descriptions%20for%20web1.pdf

- With the directive influence of the FCC, a viable national plan can be agreed within 30-60 days of initiation, and the bulk of national access to E9-1-1 can be accomplished within 120 days after acceptance of such a plan,. Full national access for all VoIP providers could require another 4-6 months.

- The above does not assume support for foreign VoIP providers that fall outside the reach of the FCC or Congress.

How to define an appropriate national plan?

No one party may have the resources currently to aggressively lead such an effort. But, the National 9-1-1 Program Office should play a coordination role if its enabling law permits.[2] NENA, as the national expert on E9-1-1 systems and services, should act as a leader in the work. A joint effort of primary parties such as bulleted above can provide the knowledge and perspectives to develop a viable national E9-1-1 access plan, if actively supported by the FCC and appropriate other bodies.

[2] "Enhance 911 Services Act," P.L.108-94, December 23, 2004.

APPENDIX

How does Routable but Non-Dialable ("RND") number access work?

This option depends on several processes, all of which are in use today for other services, but some have not been applied to E9-1-1 service. Combining the processes to support E9-1-1 for IP-based services requires some planning and coordination nationally:

- Administrative functions are required for access number assignment and management. The industry is near the finish of such a plan in regard to similar processes for wireless routing number management. A bid process such as the one that selected Neustar for this analogous numbering assignment could be employed here.

- Adding VoIP applicable RND numbers nationally requires Local Exchange Routing Guide ("LERG") involvement. Telcordia is the LERG manager. Downloading LERG assignments to all end offices and IXC switches is currently a 60-day process in the industry. Can it be speeded up?

- Assessment is needed of the feasibility and process for establishing Virtual/Simulated Facilities Groups at all involved Selective Routing switches. Some versions from certain manufacturers may not be able to handle this method.

- This method supports fixed and nomadic VoIP users, where the caller's telephone number uses an NPA that is within the NPA set for a given Selective Routing switch. Supporting NPA numbers that are used by subscribers outside the SR's NPA set requires either the Migratory (I2) solution or reliance on delivery via non-enhanced 10 digit emergency numbers associated with the PSAP.[3]

    - **Call flow:**

1. A VoIP provider presents a 9-1-1 dialed call to its PSTN access switch. The call is accompanied by two data items, an ESRN as the called number, and the caller's number.

[3] Notice that the term is "10-digit emergency numbers," not PSAP administrative lines never intended and not staffed for emergency response.

ESRN = Emergency Service Routing Number = a routable but non-dialable number assigned to the specific Selective Router switch in the target E9-1-1 system (supporting the target PSAP). These numbers are utilized only within the PSTN signaling network – they can't be directly dialed, even by accident, from phone sets or equipment connected to the PSTN. The NPA and NXX are pre-defined in PSTN routing tables as "non-dialable."

The ESRN is derived from the service address of the caller, through the relationship of service address to PSAP jurisdictional area and the Selective Router serving that PSAP.

2. The VoIP provider's PSTN access switch, the routing tandem of the IXC set as the long distance pick of the VoIP provider, and the NPA tandem, uses the first six digits or the full 10 digits of the ESRN to determine how to route the call through the PSTN to the target E9-1-1 Selective Router (SR) switch, based on the entries in the LERG for that NPA and NXX combination.

3. The target SR uses special translations to replace the ESRN with 9-1-1 as the calling number, and uses the ANI to determine, from its E9-1-1 routing database, the desired PSAP for call delivery. A method called a Simulated Facilities Group ("SFG") or Virtual Facilities Group ("VFG") or equivalent is used to accomplish this, and is utilized within a SR switch to accept and process all calls presented to it (essentially not volume sensitive, so can handle multiple 9-1-1 calls into the SR function). The net result is that the SR sees a 9-1-1 call as if it came from a physical trunk group into the SR, and the SR proceeds to process it as a normal, native 9-1-1, routing to the PSAP trunk group with the caller's ANI.

4. The PSAP 9-1-1 equipment accepts the call and the caller's number (ANI), using that number to query the E9-1-1 ALI database for caller info to display to the calltaker.